Amendments to the Specification:

Please amend the fourth full paragraph of page 2, lines 22-32 and continuing onto page 3, lines 1-12 as follows:

It is a particular problem in a SAS domain to fully utilize the transfer bandwidth available in a SAS wide port environment. As is generally known in the art, the SAS specifications include the ability to aggregate multiple standard SAS ports or PHYs (physical links) for use as a so called wide port. Information may be generally transferred in parallel among the multiple standard SAS ports aggregated to form the configured wide port. Such parallel transfer allows for improved bandwidth between a SAS initiator and a SAS target coupled by the configured wide port. However, SAS specifications (i.e., section 8.2.2.1 of the SAS 1.0 specification in which the state machine model is presented) require selection of a single PHY to further the transaction of a particular I/O request. The transaction will normally be completed by the transfer of multiple data frames but those data frames will typically be transferred on a single PHY, either until the I/O is complete or until a "credit blocked" situation occurs (a "credit blocked" situation is a flow control mechanism for a port as defined by the SAS specifications and as generally known to those of ordinary skill in the [[art]] art). The SAS specifications thereby preclude full utilization of the enhanced bandwidth of a configured wide port where a single large frame (i.e., large block) is to be transferred. Rather, the SAS specification contemplates simultaneous transmission of multiple independent frames – each over an independent PHY of the multiple PHYs aggregated to provide the desired wide port. Since SAS specifications require a single SAS frame to be transmitted over a single selected PHY link, other PHY links (i.e., ports) of the configured wide port may go unutilized utilized or underutilized. In addition, use of a single PHY link will impose the maximum possible latency on a particular transaction transactions.

Please amend the third full paragraph of page 3, lines 16-31 as follows:

The present invention solves the above and other problems, thereby advancing the state of the useful arts, by providing methods and associated structure for better utilizing available bandwidth of multiple ports/PHY links of a configured SAS wide port for transmission of a large transaction. In one aspect hereof, large blocks intended for transmission as a single transaction frame are broken into a plurality of smaller blocks and then transmitted as multiple individual frames over multiple ports/PHYs of a configured SAS wide port. A SAS initiator operating in accordance with features and aspects hereof may employ algorithms and structures to examine incoming I/O requests. If a particular I/O request is larger than a specified, pre-determined, threshold size, the large request may be broken into any number of smaller I/O requests. The number of such smaller I/O requests may be any number up to a maximum equal to the number of PHYs or ports that comprise the configured SAS wide port. In one aspect hereof, the predetermined threshold size to determine that a request is large enough to be divided may be determined either statically or dynamically based on present workloads performed by the SAS initiator and target devices.

Please amend the eighth full paragraph of page 4, lines 25-29 and continuing onto page 5, lines 1-2 as follows:

Another feature provides a method operable in a SAS domain having a SAS wide port coupling a SAS initiator [[top]] to a SAS target, the method comprising: generating a large I/O request directed toward the SAS target; splitting the large I/O request into a plurality of smaller I/O requests; distributing the smaller I/O requests over a plurality of the PHYs that comprise the SAS wide port; detecting completion of the plurality of smaller I/O requests; and completing the large I/O request in response to detecting completion of each of the plurality of smaller I/O requests.

Please amend the second full paragraph of page 9, lines 5-19 as follows:

SAS initiator 302 therefore receives a plurality of smaller I/O requests via paths 301.1 through 301.n and forwards each of the smaller I/O requests via corresponding PHYs 310.1 through 310.n to SAS expander set 304. Paths 301.1 through 301.n may be virtual communication links as noted above implemented in software/hardware/firmware customized features. Data may flow over any subset of the "n" paths so defined (any subset of the paths 301.1 through 301.n). Expander set 304 receives the smaller requests from its wide port 310 and forwards the smaller I/O requests through corresponding PHYs 312.1 through 312.n of wide port 312 to SAS target 306. SAS target 306 receives the plurality of smaller I/O ~~request~~ <u>requests</u> and processes the requests appropriately. Response information or data is returned for each of the smaller I/O requests on corresponding PHYs 312.1 through 312.n back to SAS initiator 302 for return to enhanced SAS driver 332 via paths 301.1 through 301.n. As above with respect to figure 1, enhanced SAS driver 332 accumulates or advocates the returned status information and/or data and provides the aggregated status information and/or data to the requesting application or operating system 334.

Please amend the second full paragraph of page 11, lines 6-24 as follows:

Figure 2 is a flowchart describing a method in accordance with features and aspects hereof for improving utilization of available bandwidth in a SAS wide port. Element 200 is first operable to determine whether the data size associated with a received I/O request is greater than or equal to a present threshold value. As noted above and as discussed further herein below, a threshold value may be statically predetermined or may be dynamically determined in accordance with operating parameters of the SAS domain. If element 200 determines that the received I/O request is smaller than the present threshold value, element 202 is operable to process the received I/O request normally in accordance with SAS specifications as a single frame transaction transmitted over a single selected PHY of a wide port. If element 200 determines that the data size of the received large I/O request is greater than the present threshold value, element 204 is operable to subdivide the large received a request into a plurality of smaller I/O requests. As noted above, the number of smaller I/O requests request ("M") may be determined in accordance with the number of PHYs ("n") presently available within the SAS wide port for processing of the smaller I/O requests generated by the large request subdivision of element 204. The maximum number of such smaller I/O requests may preferably be equal to the number of PHYs (n) that comprise the wide port (i.e., the number of smaller I/O requests M is less than or equal to the number of PHYs n comprising the wide port).